



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,834	07/12/2006	Patrick Le Bot	Serie 6485	7769
40582	7590	03/18/2010	EXAMINER	
AIR LIQUIDE Intellectual Property 2700 POST OAK BOULEVARD, SUITE 1800 HOUSTON, TX 77056			PETTITT, JOHN F	
			ART UNIT	PAPER NUMBER
			3744	
			MAIL DATE	DELIVERY MODE
			03/18/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/585,834

Applicant(s)

LE BOT, PATRICK

Examiner

John F. Pettitt

Art Unit

3744

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 February 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☒ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). 2/25/10  
13. ☐ Other: \_\_\_\_\_.

/Cheryl J. Tyler/  
Supervisory Patent Examiner, Art Unit 3744

/John F Pettitt /  
Examiner, Art Unit 3744

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments filed 2/25/10 have been fully considered but they are not persuasive.

1. Applicant's arguments (page 6-7) are that "mixing column" is a term of art that is readily understood to have a more specific meaning, the applicant attempts to support this by submitting references which employ the term "mixing column". In response to the applicant's arguments, the examiner disagrees that the evidence provided supports the conclusion that a mixing column is a term that must be interpreted to have the meaning that the applicant has outlined previously (a column in which a more easily volatile gaseous fraction is sent opposite a more poorly volatile liquid) because no arguments have been provided showing that such a definition is supported by the references. The reader is left to guess as to why the applicant believes the references support their position and therefore the argument is unpersuasive. Further it is noted that the references invariably explain what occurs in the column they have designated as a "mixing column" because simply stating that the column is a mixing column is not sufficient to convey that the column must have specific mixing other than that the column has mixing.

2. Applicant's arguments (page 7, ¶ 2) are that the applicant's specification defines the term "mixing column" by discussing the use of a column as well as the use of an argon column and that such use of the term differentiates the mixing column as a column that is not the argon column. In response to the applicant's arguments, the examiner disagrees as the use of the term in discussing the column does not redefine the term mixing column. Though the specification describes two columns that are identified as a mixing column and an argon column this does not mean that the application has defined the term mixing column to be columns that are not argon columns. Especially considering that either column may be said to have mixing of fluids. The applicant has not redefined the meaning of mixing column to exclude columns operating with argon and therefore the argument is unpersuasive.

3. Applicant's arguments (page 7, ¶ 3 - page 8) are that the applicant considers the broadest reasonable interpretation of the term "mixing column" to be a column in which a less volatile gas is sent opposite a more poorly volatile liquid and that there must be mixing within the column for the column to be considered a mixing column.

In response to the applicant's arguments, the examiner agrees that the claimed process requires that the mixing column must have mixing therein. The examiner further notes that assuming arguendo that the broadest reasonable interpretation espoused by the applicant is employed, it is noted that within the column (31) of Grenier (US 5735142) there is inherently some vapor that is counter currently flowing in contact with some liquid as gas portions of feed fluid flow upward and liquid portions of feed fluid flow downward due to the cooling of the top of column (31). Therefore, even by the specific definition of the applicant, Grenier (142) clearly teaches a mixing column and thereby the rejection is proper.

If the applicant desires that the process steps of the mixing column have further limitations such as the mixing column having a specified number of inputs or outputs or being in a certain location relative to the double column, the applicant is encouraged to claim such distinctions.